

In the Abstract

Please delete the Abstract and replace the following therefore:

--An image processing apparatus capable of efficient rendering is provided. In an image processing apparatus which renders, in a screen coordinate system, unit figures each constituting the surface of a three-dimensional object to be rendered, a rasterizing unit divides a rendering area corresponding to a screen into multiple unit areas, while a first unit figure is projected onto a screen coordinate system, and outputs the unit areas. A similar process is applied to second and subsequent unit figures so that the multiple unit areas constituting each unit figure are sequentially output. An area divider divides each of the unit areas sequentially output from the rasterizing unit into multiple subareas. An area discarder discards as necessary a subarea obtained by the division by the area divider according to a predetermined rule. An area writer re-merges subareas that survived the discarding process by the area discarder and writes merged areas obtained by re-merge in the memory.--